the transfer operation during coupling, uncoupling, and transfer.

- (b) The discharge containment means required by paragraph (a) of this section must have a capacity of at least:
- (1) Two barrels if it serves one or more hoses of 6-inch inside diameter or smaller, or loading arms of 6-inch nominal pipe size diameter or smaller;
- (2) Three barrels if it serves one or more hoses with an inside diameter of more than 6-inches, but less than 12 inches, or loading arms with a nominal pipe size diameter of more than 6 inches, but less than 12 inches; or
- (3) Four barrels if it serves one or more hoses of 12-inch inside diameter or larger, or loading arms of 12-inch nominal pipe size diameter or larger.
- (c) The facility may use portable means of not less than ½ barrel capacity each to meet the requirements of paragraph (a) of this section for part or all of the facility if the COTP finds that fixed means to contain oil or hazardous material discharges are not feasible.
- (d) A mobile facility may have portable means of not less than five gallons capacity to meet the requirements of paragraph (a) of this section.
- (e) Fixed or portable containment may be used to meet the requirements of paragraph (a)(3) of this section.

[CGD 75–124, 45 FR 7172, Jan. 31, 1980, as amended by CGD 86–034, 55 FR 36253, Sept. 4, 1990; CGD 93–056, 61 FR 41460, Aug. 8, 1996]

§154.540 Discharge removal.

Each facility to which this part applies must have a means to safely remove discharged oil or hazardous material, within one hour of completion of the transfer, from the containment required by §154.530 of this part without discharging the oil or hazardous material into the water.

[CGD 93-056, 61 FR 41460, Aug. 8, 1996]

§ 154.545 Discharge containment equipment.

- (a) Each facility must have ready access to enough containment material and equipment to contain any oil or hazardous material discharged on the water from operations at that facility.
- (b) For the purpose of this section, "access" may be by direct ownership,

joint ownership, cooperative venture, or contractual agreement.

- (c) Each facility must establish time limits, subject to approval by the COTP, for deployment of the containment material and equipment required by paragraph (a) of this section considering:
- (1) Oil or hazardous material handling rates;
- (2) Oil or hazardous material capacity susceptible to being spilled;
 - (3) Frequency of facility operations;
 - (4) Tidal and current conditions;
- (5) Facility age and configuration; and
- (6) Past record of discharges.
- (d) The COTP may require a facility to surround each vessel conducting an oil or hazardous material transfer operation with containment material before commencing a transfer operation if—
- (1) The environmental sensitivity of the area requires the added protection;
- (2) The products transferred at the facility pose a significant threat to the environment;
- (3) The past record of discharges at the facility is poor; or
- (4) The size or complexity of the transfer operation poses a significant potential for a discharge of oil or hazardous material; and
- (5) The use of vessel containment provides the only practical means to reduce the extent of environmental damage.
- (e) Equipment and procedures maintained to satisfy the provisions of this chapter may be utilized in the planning requirements of subpart F and subpart H of this part.

[CGD 75–124, 45 FR 7172, Jan. 31, 1980, as amended by CGD 86–034, 55 FR 36253, Sept. 4, 1990; CGD 93–056, 61 FR 41460, Aug. 8, 1996; USCG–1999–5149, 65 FR 40825, June 30, 2000]

§ 154.550 Emergency shutdown.

- (a) The facility must have an emergency means to enable the person in charge of the transfer on board the vessel, at that person's usual operating station, to stop the flow of oil or hazardous material from the facility to the vessel. The means must be—
- (1) An electrical, pneumatic, or mechanical linkage to the facility; or

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- (2) An electronic voice communications system continuously operated by a person on the facility who can stop the flow of oil or hazardous material immediately.
- (b) The point in the transfer system at which the emergency means stops the flow of oil or hazardous material on the facility must be located near the dock manifold connection to minimize the loss of oil or hazardous material in the event of the rupture or failure of the hose, loading arm, or manifold valve.
- (c) For oil transfers, the means used to stop the flow under paragraph (a) of this section must stop that flow within...
- (1) 60 seconds on any facility or portion of a facility that first transferred oil on or before November 1, 1980; and
- (2) 30 seconds on any facility that first transfers oil after November 1, 1980.
- (d) For hazardous material transfers, the means used to stop the flow under paragraph (a) of this section must stop that flow within—
- (1) 60 seconds on any facility or portion of a facility that first transferred hazardous material before October 4, 1990; and
- (2) 30 seconds on any facility that first transfers hazardous material on or after October 4, 1990.

 $[{\rm CGD}~86\text{--}034,\,55~{\rm FR}~36253,\,{\rm Sept.}~4,\,1990]$

§154.560 Communications.

- (a) Each facility must have a means that enables continuous two-way voice communication between the person in charge of the vessel transfer operation and the person in charge of the facility transfer operation.
- (b) Each facility must have a means, which may be the communications system itself, that enables a person on board a vessel or on the facility to effectively indicate the desire to use the means of communication required by paragraph (a) of this section.
- (c) The means required by paragraph (a) of this section must be usable and effective in all phases of the transfer operation and all conditions of weather at the facility.
- (d) A facility may use the system in $\S154.550(a)(2)$ to meet the requirement of paragraph (a) of this section.

(e) Portable radio devices used to comply with paragraph (a) of this section during the transfer of flammable or combustible liquids must be marked as intrinsically safe by the manufacturer of the device and certified as intrinsically safe by a national testing laboratory or other certification organization approved by the Commandant as defined in 46 CFR 111.105-11. As an alternative to the marking requirement, facility operators may maintain documentation at the facility certifying that the portable radio devices in use at the facility are in compliance with this section.

[CGD 75–124, 45 FR 7172, Jan. 31, 1980; 45 FR 43705, June 30, 1980, as amended by CGD 93–056, 61 FR 41460, Aug. 8, 1996]

§154.570 Lighting.

- (a) Except as provided in paragraph (c) of this section, for operations between sunset and sunrise, a facility must have fixed lighting that adequately illuminates:
- (1) Each transfer connection point on the facility;
- (2) Each transfer connection point in use on any barge moored at the facility to or from which oil or hazardous material is being transferred;
- (3) Each transfer operations work area on the facility; and
- (4) Each transfer operation work area on any barge moored at the facility to or from which oil or hazardous material is being transferred.
- (b) Where the illumination is apparently inadequate, the COTP may require verification by instrument of the levels of illumination. On a horizontal plane 3 feet above the barge deck or walking surface, illumination must measure at least:
- (1) 5.0 foot candles at transfer connection points; and
- (2) 1.0 foot candle in transfer operations work areas.
- (c) For small or remote facilities, the COTP may authorize operations with an adequate level of illumination provided by the vessel or by portable means.